

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1, 3, 4, 6, 8-16, 37, and 39 are pending in the present application. Claims 2, 5, 18, 38, and 40-49 are canceled and Claim 1 is amended by the present amendment. Claims 7, 17, and 19-36 were previously canceled.

In the outstanding Official Action, Claims 2, 37, 38, and 40-49 were objected to; Claims 1-6, 8-13, 15, 18, 37-47, and 49 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,936,342 to Ono et al. (herein “Ono”) in view of Japanese Patent Application Publication No. 08-022785 to Osamu et al. (herein “Osamu”); Claim 16 was rejected under 35 U.S.C. § 103(a) as unpatentable over Ono in view of Osamu and U.S. Patent No. 5,827,102 to Watkins et al. (herein “Watkins”); Claims 1, 3, 4, and 18 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,529,524 to Jones in view of Osamu; and Claims 14 and 48 were indicated as allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding the objection to the claims, Claims 2, 37, 38, and 40-49 are canceled by the present amendment, thereby rendering moot the objection.

Further, applicants gratefully acknowledge the Examiner’s indication of allowable subject matter; however, applicants respectfully submit that the present amendment also places this application in condition for allowance.

Applicants respectfully traverse the rejection of claims under 35 U.S.C. § 103(a) as unpatentable over Osamu in combination with Ono, Watkins, and Jones.

Amended Claim 1 is directed to a method of manufacturing a flat panel display that includes, *inter alia*,

depositing a metal back layer on a faceplate having a phosphor layer formed on a substrate;

heating the face plate in a vacuum atmosphere of 1×10^{-4} Pa or less to deaerate the face plate;
cooling the deaerated face plate in a vacuum atmosphere of 1×10^{-4} Pa or less;

As the face plate is heated and cooled in a vacuum atmosphere, the cooled face plate is clean. Therefore, when the getter film is made (i.e., deposited), the getter film does not absorb out-gas from the face plate, although as the temperature of the face plate is increased during deposition, the face plate may emit out-gas. Thus, the deposited getter film is clean and can maintain a vacuum atmosphere in the flat panel display, and flat panel displays manufactured in accordance with the method can work for a long time. If the hermetically sealed gap does not maintain a vacuum atmosphere, electrons emitted from the rear plate do not reach the face plate and the flat panel display does not work.¹

Applicants respectfully submit that the claimed features mentioned above are not taught or suggested by Ono and Osamu. As noted in the outstanding Office Action, Ono “fails to teach heating the faceplate in a vacuum atmosphere to deaerate the faceplate; cooling the faceplate in a vacuum atmosphere.”² However, applicants respectfully traverse the statement in the outstanding Office Action that Osamu “teaches heating the faceplate in a vacuum atmosphere to deaerate the faceplate; cooling the faceplate in a vacuum atmosphere (paragraphs 14, 29 and 30).”³

Osamu only indicates that “after a surface cleaning process, an evaporation type getter is evaporated with maintaining a vacuum atmosphere.”⁴ In other words, Osamu only teaches heating the faceplate and does not teach cooling the faceplate in a vacuum atmosphere of 1×10^{-4} Pa or less before the getter film is deposited. Accordingly, it is respectfully submitted that Osamu does not teach or suggest “cooling the deaerated face plate in a vacuum

¹ Specification at paragraphs [0069]-[0073].

² Office Action mailed August 7, 2003, at page 4, lines 17-19.

³ Id. at page 5, lines 2-4.

⁴ Osamu at paragraph [0030].

atmosphere of 1×10^{-4} Pa or less," as in amended Claim 1. Further, it is respectfully submitted that the remaining references applied in the outstanding Official Action also do not teach or suggest this feature.

Accordingly, it is respectfully submitted that independent Claim 1 and the claims depending therefrom are allowable.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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